

Fig. 18 is a graph showing a region of high reliability based on a relation between bumps that have outside diameters of 80  $\mu\text{m}$  and 40  $\mu\text{m}$  and a minimum load in the first embodiment;

5 Fig. 19 is a graph of a relation between a heating temperature and a reaction rate of a resin sheet (anisotropic conductive film sheet) in the third embodiment;

10 Fig. 20 is a perspective view of an electronic component mounting apparatus used in the first embodiment;

Fig. 21A, Fig. 21B, Fig. 21C and Fig. 21D are a perspective view showing a position recognizing operation on the component side of the electronic component mounting apparatus of Fig. 20, a view of a position recognition image of the component, a perspective view showing a position recognizing operation on the board side, and a view of a position recognition image of the board, respectively;

15 Fig. 22 is a schematic view of a supersonic wave applying device used in the fourth embodiment;

Fig. 23 is a schematic view of a sticking device used in the fifth embodiment;

20 Fig. 24A and Fig. 24B are enlarged sectional views in the vicinity of a bump for explaining a comparison between an ACF processing method and the processing method

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of the above embodiment;

Fig. 25 is a schematic sectional view of a bonded state produced by a method and apparatus for mounting an electronic component of, for example, an IC chip on a circuit board according to a ninth embodiment of the present invention;

Fig. 26 is a partially enlarged schematic sectional view of a resin sheet employed by the method and apparatus for mounting the electronic component of, for example, an IC chip on the circuit board of the ninth embodiment;

Fig. 27 is a schematic sectional view of an insulating resin and an inorganic filler in a bonded state achieved by a method and apparatus for mounting an electronic component of, for example, an IC chip on a circuit board according to a thirteenth embodiment of the present invention;

Fig. 28A, Fig. 28B, Fig. 28C and Fig. 28D are schematic sectional views of various examples of electronic component units of an anisotropic conductive layer employed by a method and apparatus for mounting an electronic component of, for example, an IC chip on a circuit board according to a fourteenth embodiment of the present invention;

Fig. 29A, Fig. 29B, Fig. 29C and Fig. 29D are

schematic sectional views of various examples of an anisotropic conductive layer employed by a method and apparatus for mounting an electronic component of, for example, an IC chip on a circuit board according to  
5 modification examples of the fourteenth embodiment of the present invention;

Fig. 30 is a schematic sectional view of a bonded state achieved by using the anisotropic conductive layer employed by the method and apparatus for mounting the  
10 electronic component of, for example, an IC chip on the circuit board of the fourteenth embodiment shown in Fig. 29A;

Fig. 31 is a schematic sectional view of a bonded state achieved by using the anisotropic conductive layer employed by the method and apparatus for mounting the  
15 electronic component of, for example, an IC chip on the circuit board of the fourteenth embodiment shown in Fig. 29B;

Fig. 32A and Fig. 32B are schematic sectional views of a bonded state achieved by using the anisotropic conductive layer employed by the method and apparatus for mounting the electronic component of, for example, an IC chip on the circuit board of the fourteenth embodiment shown in Fig. 29C and Fig. 29D;

25 Fig. 33A, Fig. 33B, Fig. 33C, Fig. 33D, Fig. 33E